West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-05700008-2018
Application Received: August 11, 2017
Plant Identification Number: 03-054-057-00008

Permittee: Verso Luke LLC
Facility Name: West Virginia Operations
Mailing Address: 300 Pratt Street, Luke, MD 21540

Revised: N/A

Physical Location:

Beryl, Mineral County, West Virginia

UTM Coordinates:

667.00 km Easting • 4,371.00 km Northing • Zone 17

Directions:

From U.S. Interstate 68, at Frostburg, MD take MD Route 36 South to Westernport, MD. Turn right onto MD Route 135 at Westernport and travel approximately 1.7 miles. Turn left onto the Potomac River Bridge, which becomes WV Route 46. Travel approximately 150 yards and

facility is on left side of State Route 46.

Facility Description

Lime kiln and woodyard which supply supporting operations for pulp and paper mill. SIC Codes: 2621; 3274.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]							
Regulated Pollutants	Potential Emissions per Operating Scenario				2016 Actual		
	Gas-fired	Oil-fired ²	#4 Recycled Oil-fired	Petcoke	Emissions 1		
Carbon Monoxide (CO)	47.12	38.55	38.55	52.78	2.82		
Nitrogen Oxides (NO _x)	120.59	84.46	84.46	156.49	72.86		
Particulate Matter (PM _{2.5})	718.75	718.75	718.75	718.75	80.63		
Particulate Matter (PM ₁₀)	718.75	718.7	718.75	718.75	82.26		
Total Particulate Matter (TSP)	949.29	949.29	949.29	949.29	143.46		
Sulfur Dioxide (SO ₂)	0.48	0.26	0.48	7.07	0.09		
Volatile Organic Compounds (VOC)	38.76	38.76	20.88	18.12	22.09		
Hazardous Air Pollutants ³	Gas-fired	Oil-fired ²	#4 Recycled Oil-fired	Petcoke	2016 Actual Emissions ¹		
Acetaldehyde	4.67	4.67	2.51	4.16	1.25		
Hydrochloric acid	0.14	0.14	0.14	3.36	0.08		
Methanol	36.2	36.2	36.2	34.83	9.47		
Nickel Compounds	< 0.01	< 0.01	< 0.01	5.69	3.7 × 10 ⁻³		
Phenol	0.79	0.79	1.46	1.46	0.45		
Aggregate HAPs ⁴	44.16	44.16	43.57	47.8	12.55		

Actual emissions are from the State and Local Emissions Inventory System (SLEIS) 2016 Summary Report entitled Total Emissions by Source.

Title V Program Applicability Basis

This facility has the potential to emit 156.49 tpy of NO_x ; 718.75 tpy of PM_{10} ; 36.2 tpy of methanol; and 47.8 tpy of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Verso Luke LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

The Oil-fired scenario is two scenarios: the first combusting #2 fuel oil and the second combusting #6 fuel oil. According to the application, the potential emissions for this #2 / #6 fuel oil scenario is based on burning #6 fuel oil since the permittee stated that this oil represents the highest potential to emit of all the oil types.

There are other HAPs listed in the application, each of them with potential emissions less than 1.0 tpy.

Aggregate potential and actual HAPs were determined by summing the speciated HAPs listed in the renewal application and 2016 SLEIS data, respectively.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules. This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	To Prevent and Control Particulate Air
		Pollution from Combustion of Fuel in
		Indirect Heat Exchangers.
	45CSR6	Open burning prohibited.
	45CSR7	To Prevent and Control Particulate Air
		Pollution from Manufacturing Process
		Operations
	45CSR10	To Prevent and Control Air Pollution From
		the Emission of Sulfur Oxides.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification,
		Relocation, and Operation of Stationary
		Sources of Air Pollutants
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart MM	Pulp Mills MACT
	40 C.F.R. Part 63, Subpart ZZZZ	RICE MACT
	40 C.F.R. Part 64	Compliance Assurance Monitoring (CAM)
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
G. 4 O 1		
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 et seq., 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)	
R13-0511C June 17, 2009		PD97-122, PD07-017	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

In the following discussion, the term "current permit" means Title V permit R30-05700008-2013, unless otherwise noted or determined from the context. The permittee stated in 3/21/2018 technical correspondence that there have been no changes to the facility or its operation during the current permit term. Accordingly, there have been no modifications to the Title V permit and the underlying NSR permit R13-0511C during the term of the current permit; nevertheless, the following changes have been made for this renewal:

- I. Permittee Name Change. The current permit was issued to Luke Paper Company. However, for this Title V permit renewal the name has been changed to Verso Luke LLC as has been acknowledged by the Director in his letter to the permittee dated April 19, 2018. This required the following changes:
 - a. The name on the permit cover and in the headers has been changed.
 - b. The business entity has been changed from corporation to LLC on page 2.
 - c. The 45CSR10 Monitoring Plan (Appendix A) has been revised by deleting "NewPage Corporation" and changing "Luke Paper Company" to "Verso Luke LLC".
- II. Facility-wide Reporting Revisions. The following changes involving electronic reporting have been made in the facility-wide requirements:
 - a. Condition 3.5.3. The paragraph has been updated and the DAQ C&E e-mail address has been added.
 - b. Condition 3.5.5. (Compliance Certification) The paragraph has been updated, and the DAQ and US EPA e-mail addresses have been added.
 - c. Condition 3.5.6. (Semi-annual monitoring reports) The last statement in the paragraph and the DAQ e-mail address have been added.
- III. Visible Emissions Monitoring. The language "(but no less than 1 minute)" has been added to the visible emissions monitoring requirements in permit conditions 4.2.2.a. and 4.2.2.b. This change has been made in other renewal permits so that the time requirement is specific.
- IV. 40 C.F.R. 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This subpart is applicable to the Auxiliary Gas Drive Motor (Em. Unit ID: 049), and the requirements are included in the current Title V permit. However, the following changes have been made with respect to this regulation:
 - a. The statement "This condition is subject to the compliance date specified in condition 5.1.1." following the citations of authority in Section 5.0 has been deleted since the compliance date in condition 5.1.1. has passed.
 - b. The language "2 days" has been changed to "2 business days" in condition 5.1.6. to reflect the current regulation.
 - c. The language in condition 5.1.2.b. has been updated to reflect the current regulation by adding "and replace as necessary".
 - d. The language in condition 5.1.7. has been updated to reflect the current regulation. Requirements in §63.6640(f)(4) have been excluded since the facility is not an area source of HAP.

- V. 40 C.F.R. 63 Subpart MM National Emissions Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills. The requirements of this subpart were in the current operating permit. However, parts of the regulation were modified on October 11, 2017. The compliance date for the revised requirements applicable to an existing source is October 11, 2019, except that the first 5-year testing must be conducted by October 13, 2020 in accordance with 40 C.F.R. §63.863(c). Due to the revisions to this regulation, and further review of the applicability of testing and recordkeeping requirements, the following changes and additions have been made to permit conditions in the renewal operating permit:
 - a. Current Condition 4.1.14. The citation of authority has been changed from §63.864(k)(2)(iii) to §63.864(k)(2)(iv) since a scrubber is utilized rather than an ESP.
 - b. Proposed Condition 4.1.22. This condition incorporates the general duty requirements in §63.860(d).
 - c. Proposed Condition 4.3.1. This revised performance testing deadline for existing sources has been incorporated to the renewal permit.
 - d. Proposed Condition 4.3.2. This performance testing requirement to establish operating limits (or to retain prior established limits obtained utilizing Subpart MM test methods and procedures) has been incorporated to the renewal permit.
 - e. Proposed Condition 4.3.3. This performance test requirement effectively incorporates the revised Subpart MM testing into the renewal permit and incorporates by reference the test methods, procedures, and calculations prescribed in §63.865. IBR of test methods and calculations for demonstrating compliance is permissible according to U.S. EPA guidance¹.
 - f. Current Condition 4.4.7. The current permit condition set forth the requirements for a startup, shutdown, and malfunction plan (SSMP) based upon 40 C.F.R. §63.866(a). This section of Subpart MM is now reserved in the current regulation and such language has not be relocated to another section. Furthermore, according to Table 1 to Subpart MM, SSMPs are not applicable to Subpart MM. Based upon these facts, the SSMP requirements in 4.4.7. have been deleted for the renewal permit.
 - g. Proposed Condition 4.4.7. Recordkeeping of operating parameters established and monitored under Subpart MM is applicable and has been incorporated into the renewal permit. In the event of failure to meet an applicable standard or operating limitation, certain information must be recorded, which also has been incorporated into the renewal permit condition. The language regarding opacity in §63.866(d)(1) (condition 4.4.7.(4)(i)) has been excluded since the kiln is not subject to a Subpart MM opacity standard.

VI. Miscellaneous Changes.

a. The capacity of the Silo Bin Vent (Em. Unit ID: 2S) has been changed from 16 tons/hr to 188.8 lb/hr as provided by the permittee in technical correspondence dated 3/21/2018.

¹ U.S. EPA's White Paper Number 2 for Improved Implementation of the Part 70 Operating Permit Program (March 5, 1996), located at https://www.epa.gov/sites/production/files/2015-08/documents/wtppr-2.pdf and accessed by the writer on April 26, 2018. See section E.2.c. on page 38 of the guidance, which reads that IBR in permits may be appropriate and useful under several circumstances.

b. In the permit shield section 3.7.2.b. for 45CSR27, the potential emissions of chloroform was changed from 888 lb/yr to 872 lb/yr (threshold 1,000 lb/yr). Similarly, the potential emissions of formaldehyde was changed from 820 lb/yr to 504 lb/yr (threshold 1,000 lb/yr). The permittee provided these data in technical correspondence dated 3/21/2018.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 C.F.R. 60 Subpart BB Standards of Performance for Kraft Pulp Mills. The Lime Kiln was installed in 1966. It has not been modified since. Since it was not constructed or modified after September 24, 1976, it is not subject to the requirements of this subpart in accordance with §60.280(b).
- b. **45CSR27** *To Prevent and Control the Emissions of Toxic Air Pollutants*. The total amounts of toxic air pollutants estimated to be emitted from the West Virginia operations are as follows: benzene 626 lb/yr (threshold 1,000 lb/yr); chloroform 872 lb/yr (threshold 1,000 lb/yr); formaldehyde 504 lb/yr (threshold 1,000 lb/yr); Methylene chloride 32 lb/yr (threshold 5,000 lb/yr). Since the estimated emission rates of all toxic air pollutants are below the respective emission thresholds, the regulations in 45CSR27 are not applicable.
- c. Condition 4.2.1. in Permit R13-0511C. Compliance stack testing was required within 180 days of first use of pet coke as a fuel for the lime kiln. According to a May 25, 2012 email from the permittee, the testing was performed on March 25, 2009. The requirement has been fulfilled, and there are no ongoing requirements; therefore, the condition is no longer applicable.
- d. 40 C.F.R. 60 Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Tanks 029, 030, 032, 033, 034, 035, 037, 038, and 058, were constructed in 1966 and have not been reconstructed or modified; therefore, this regulation is not applicable to these tanks.
- e. 40 C.F.R. 60 Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. This regulation applies to affected facilities listed in 40 C.F.R. §60.670(a)(1) located at nonmetallic mineral processing plants. 40 C.F.R. §60.671 defines a nonmetallic mineral processing plant as "any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located...." The permittee utilizes the nonmetallic mineral limestone in its Beryl facility operations. However, according to technical correspondence (5/25/2012 email), the permittee does not crush or grind limestone at the Beryl facility. Therefore, the Beryl facility does not meet the definition of a nonmetallic mineral processing plant in 40 C.F.R. §60.671 and therefore this regulation does not apply.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date:

May 10, 2018

Ending Date:

June 11, 2018

All written comments should be addressed to the following individual and office:

Denton B. McDerment, PE
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Denton B. McDerment, PE West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304

Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

No comments were received from either the public or U.S. EPA.